Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of))	
)		
Restoring Internet Freedom)	WC Docket No. 17-108	

COMMENTS

It is my privilege to submit these comments in response to the Federal Communications Commission's (FCC or agency) Notice of Proposed Rulemaking (NPRM) in which the agency asks a series of important questions about how best to ensure an open internet without killing investment and innovation.

Based on my experience in government and in the technology industry, including my current service as Vice Chair of the Internet Education Foundation and my extensive work on issues related to internet governance, internet-based innovation and cybersecurity, I believe resolving the issues raised in this NPRM are critical for ensuring a flexible, dynamic and open internet that will continue to provide a positive user experience and drive economic growth and innovation. Further, as explained below, I believe that moving away from a public utility model of regulating internet-based services is a wise move and one that is critical be made if the U.S. is to continue to lead the world in the 21st digital economy.

A Title II Regulatory Regime for Internet-based services Depresses Investment and Slows Innovation

I urge the Commission to focus on the impact a Title II utility regime has and will have on internet investment and innovation. Further, I encourage the FCC to closely consider whether that framework is more likely to promote investment and innovation or to discourage both.

As noted in the NPRM, the agency's decision in 2015 to impose Title II regulation represented a dramatic change in a longstanding policy of light-touch regulation for the internet. Before 2015, during a period of more than 20 years, policymakers across the political spectrum largely agreed that the best way to support the newest generation of communications technologies — and the jobs, productivity and economic growth that that was expected to generate - was to let innovators test their ideas in the market place and allow consumers to vote with their wallets.

That freedom to innovate without permission was in stark contrast to the previous decades of utility regulation that required companies to seek government approval of services before they could be offered to the public. It also facilitated the aggressive move into wireless communications and mobile device growth. It's why most Americans can text, talk, and get online whenever they want using a mobile app. It allowed smart and adventurous entrepreneurs and engineers to do what they do best — innovate and create products and services that consumers welcome at prices they can afford.

The era of light-touch regulation also unleashed an enormous wave of investment by a range of businesses that identified vast new opportunities to expand their operations, provide stable employment for existing employees while being able to hire new ones, enhance their profitability and provide their shareholders with a satisfactory return. Internet Service Providers alone invested some \$1.5 trillion in the Internet ecosystem during the 20 years preceding the recent Open Internet Order imposition of a Title II regime for broadband internet access services. Importantly, that investment was not front-loaded in the early years, but continued to grow steadily as waves of innovation created new business opportunities. USTelecom, for example, has reported that investment rose 8.7 percent in 2013 (from \$69 billion to \$75 billion) and climbed an additional 4.0 percent in 2014 (from \$75 billion to \$78 billion) – the last two full years before the application of Title II to the internet.² Since the imposition of Title II, however, a range of sources report that broadband investment is down. USTelecom says investment fell in both 2015 and 2016, finishing last year nearly \$3 billion lower than in 2014.³ A study by economist Hal Singer shows a 5.6 percent decline in capital expenditures (capex) among the 12 largest ISPs from 2014-2016, the only non-recession drop on record. CTIA reports an even larger drop in wireless capex, which dropped \$5.5 billion last year to \$26.4 billion, the biggest one-year dip since it began tracking investment data more than ten years ago.⁵

The investment trends summarized above are troubling. For the innovators and engineers grappling with bringing the next iteration of internet-based services and applications to the mass market, slowing the pace at which digital networks are expanded and improved comes at precisely the wrong time. Less money being spent on digital infrastructure will disrupt and delay the development of network-based innovations that are the backbone to all internet connections.

Among innovators and engineers, the shift away from light-touch regulation and towards the more proscriptive utility model is fraught with landmines because it has greatly expanded regulators' ability to involve themselves in the daily operations of internet businesses and to pre-emptively block services and strategies from getting to the market. Consider how the so-called "general conduct" rule from the 2015 Open Internet Order requires that companies seek the FCC's permission to offer a new service before it is released to consumers. In an implicit acknowledgment of the business risks created by such uncertainty, the Commission said internet businesses could seek an "advisory opinion" before investing in a new service. It's hard to imagine a more sure way to kill creative thinking than to tell engineers, innovators and entrepreneurs to ask permission from the government before they can make their newest and best idea available to consumers. Perversely, the regulation essentially punishes anyone looking to differentiate themselves from their competitors by coming up with something new. As many

¹ USTelecom, Broadband Investment, Historical Broadband Provider Capex (2017)

² http://www.ustelecom.org/sites/default/files/images/Historical-Broadband-Provider-Capex-072015-big.png

³ https://www.ustelecom.org/blog/broadband-investment-heads-wrong-direction

⁴ https://haljsinger.wordpress.com/2017/03/01/2016-broadband-capex-survey-tracking-investment-in-the-title-ii-era/

⁵ https://www.ctia.org/docs/default-source/default-document-library/annual-year-end-2016-top-line-survey-results-final.pdf?sfvrsn=2

have commented on the iPhone's 10 year anniversary, the iPhone likely would not made it to market under the current Title II regime adopted in the 2015 Open Internet Order.

Former FCC Chief Technologist Dave Farber observed in a recent podcast that the 2015 Open Internet Order rules created an environment in which smart companies shifted investment dollars from engineering and product development to lobbyists and lawyers. Instead of engineers working to make technology more efficient and secure, it means companies focus on huddling with regulators to seek a thumbs up (or thumbs down) before implementing new ideas. Oddly, the general conduct rule places a heavy burden on regulators by effectively asking them to see into the future as a way of evaluating whether an untested new service or pricing plan will be welcomed and benefit consumers or will do them harm. Specifically, the 2015 Open Internet Order's general conduct rule is the perfect example of the impossible situation the Title II regime creates for both the regulator and the innovation that entities regulated by the FCC want to offer.

Consider the back and forth over so-called "zero-rating" plans that allow consumers to use more data without a hit against their data caps. Beginning in 2014, mobile carriers began experimenting with so-called "sponsored data" plans that limited the impact of some consumer activity on data allotments. The consumer reception was positive, prompting T-Mobile to be the first out of the box with full-fledged zero-rating, "Binge On" in November 2015. The new approach initially allowed subscribers to stream data from 24 different services, including Netflix, HBO, Hulu and ESPN, without accruing charges against their data allotments. At first, the new direction won plaudits from then FCC Chair Thomas Wheeler, who called Binge On "highly innovative and highly creative." "It's clear in the Open Internet Order that we said we are pro-competition and pro-innovation," Wheeler told *Ars Technica* ten days after the T-Mobile announcement. "Clearly this meets both of those criteria." Within months of this apparent green light, AT&T, Sprint, Verizon and several smaller carriers rolled out competing zero-rating options.

But after push back from interest groups who had supported Title II for the Internet, the green light turned yellow. The FCC let it be known that it was taking a more skeptical look at zero rating, creating months of uncertainty about whether the popular plans were acceptable or unacceptable under its new rules. In January 2017, 14 months after Binge On came to market, the Wireless Bureau officially challenged AT&T and Verizon's free data offerings.⁹

It's hard to see how the mixed signals advanced innovation, helped consumers or otherwise spurred investment. But the experience demonstrates how a Title II regime can create uncertainty and undermine innovation while regulators wrestle with interpreting a general conduct standard. The evidence to date is clear: the shift from light-touch regulation to Title II, which was created more than

⁶ http://hightechforum.org/dave-farber-on-title-ii-isp-regulation/

⁷ https://newsroom.t-mobile.com/media-kits/un-carrier-x.htm

⁸ https://arstechnica.com/business/2015/11/t-mobiles-data-cap-exemption-for-video-gets-fcc-chairmans-approval/

⁹ http://thehill.com/business-a-lobbying/313869-fcc-takes-aim-at-att-verizon-over-zero-rating-services

80 years ago for a different technology at a very different time in a very different marketplace, is an anathema for innovation.

Acceptable Trade-Offs – A False Choice?

There is an additional question being posed by many organizations – could a slowdown in investment be an appropriate cost that consumers should accept for maintaining a so called "open internet"? Here, too, the Commission can look at the record. History shows that investment and innovation in on-line networking flourished once Congress pulled back Title II regulations in 1996 for broadband services. In the absence of Title II, investment in broadband related networks exploded as noted above. This investment and the innovation it spurred produced the digital economy we now take for granted. History also confirms that consumers were able to enjoy tremendous benefits without any sacrifice in their freedom to use the internet in the way they saw fit. Some have set up a false dichotomy suggesting that consumers and the Commission must choose between an open internet and an innovative one. But that is the opposite of actual experience. The truth is they have gone hand-in-hand almost since day one.

Using Title II as the basis for the Open Internet principles imposes significant costs with little if any commensurate benefits for the sector or for consumers. Better to embracing clear and simple open internet principles premised on a light touch regulatory regime that has a laser focus on addressing violations. As we've seen in the past, that approach would help maximize technology's ability to power economic growth, enhance productivity and expedite the delivery to consumers of more and better internet-based experiences.

Title II Does Not Address Harms Consumers Are Concerned About

Ironically, for all of its costs, Title II regulation doesn't even address the sort of abuses that actually have hurt consumers in recent years. For example, Netflix confessed in June 2016 that it had been secretly slowing transmissions to its customers for five years. It did so, the company said, to help customers stay within their data caps. Consumers might prefer to make those decisions themselves, and they certainly aren't happy when videos are choppy or freeze because of a secret decision by a company they are paying for quality service. But the FCC's Title II regulation can't touch Netflix for throttling because it lacks jurisdiction over the popular streaming service. Nor does Title II enable the FCC to address abuses by search engines or social media companies, arguably the most powerful entities in today's Internet. The European Union recently imposed a \$2.7 billion fine on Alphabet, Google's parent company, for playing favorites with search results. Consumers are big losers when search results are manipulated, but there's nothing the FCC can do about it with or without Title II regulation. Like Netflix, Alphabet is not subject to FCC oversight.

¹⁰ https://www.cnet.com/news/netflix-admits-throttling-video-speeds-on-at-t-verizon/

Conclusion

Jettisoning old-school telecommunications regulation by discarding Title II as a basis for protecting the open internet principles seems the best and cleanest path to reenergizing the investment cycles we've seen under a non-Title II regime, while simultaneously flashing a green light for a new wave of permission-less innovation. I respectfully urge the Commission to adopt its proposal to base the open internet principles on Title I of the Communications Act and press down on the innovation and investment accelerator.

Respectfully submitted,

Shane Tews